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EXAMINER				
BELYAVSKIY, MICHAEL A				
ART UNIT		PAPER NUMBER		
1644				
NOTIFICATION DATE		DELIVERY MODE		
01/27/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/594,605

Applicant(s)

SUGIYAMA ET AL.

Examiner

Michail A. Belyavskiy

Art Unit

1644

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date See Continuation Sheet

Continuation of Attachment(s) 3. Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :5/15/07;
1/22/08;3/20/08;8/14/08;03/05/09.

DETAILED ACTION

1. Applicant's amendment, filed 10/16/09 is acknowledged.

Claims 1-11 are pending.

2. Applicant's election with traverse of Group I, claims 1, 3-5, now claims 1, 3-5 and 9-11 in the reply filed on 10/16/09 is acknowledged. The traversal is on the ground(s) that Kanato et al., is not a priority prior art publication, since Japanese Patent Application 2004-096744 was filed on March 29, 2004. Applicant indicated that he submitted a translation of said Patent Application.

It is noted however, that there was no English translation of Japanese Patent Application 2004-096744 is Applicant's reply filed on 10/16/09.

The requirement is still deemed proper and is therefore made FINAL.

Claims 2, 6-8 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b) as being drawn to nonelected inventions.

Claims 1, 3-5 and 9-11 read on the method of separating hepatic, endothelial or hematopoietic progenitor cells from cell population, comprising detecting the expression of WT1 gene are under consideration in the instant application.

3. Applicant's provision of the foreign priority document Japanese Patent Application 2004-096744 is acknowledged. However, an English translation has not been provided. Thus, it is unclear whether the foreign priority document provides written support for the instant claims.

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 3, 4, 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, 4, 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step is resolution step: it is unclear how to separate hepatic, endothelial or hematopoietic progenitor cell from a cell population by just detecting the expression of WT1 gene. After performing the steps as recited in claim 1, only "WT1-expressing cells" would be detected. The minimum requirements for method steps minimally include a contacting step in which the reaction of the sample with the reagents necessary for the assay is recited, a detection step in which the reaction steps are quantified or visualized, and a correlation step describing how the results of the assay allow for the determination.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1,3-5 and 9-11 are rejected under 35 U.S.C. 102(a) as being anticipated by Kanato et al (IDS) , or Fraizer et al (Blood, 1995, v.86, pages 4704-4706)

Katano et al., teach a method of separation hematopoietic progenitor cell from a cell population, comprising detected the expression of WT1 gene (see entire document, Abstract and Material and Method in particular). Katano et al., teach that expression of WT1 gene was detected by using expression of WT1 gene.

Fraizer et al., teach a method of separation hematopoietic progenitor cell from a cell population, comprising detected the expression of WT1 gene (see entire document, Abstract and Material and Method in particular). Fraizer et al., teach that expression of WT1 gene was detected by using expression of WT1 gene. (see Table I in particular).

The references teaching anticipates the claimed invention.

7. Claims 1,3-5 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by WO' 97/39354 (IDS) or Menssen et al (Blood, 1997, v.89, pages 3486-3493, IDS) , or Baird et al (Exp Hematol, 1997, v.13, pages 1311-1312, IDS) or Loeb et al., (Leukemia, 2003, v.17, pages 965-971) or Tsuboi et al (Leukemia Research, 1999, v.23, pages 499-505)

WO' 97/39354 teaches a method of separation hematopoietic progenitor cell from a cell population, comprising detected the expression of WT1 gene (see entire document, Abstract in particular). WO' 97/39354 teaches that expression of WT1 gene was detected by using expression of WT1 gene.

Menssen et al ., teach a method of separation hematopoietic progenitor cell from a cell population, comprising detected the expression of WT1 gene (see entire document, Abstract and Material and Method in particular). Menssen et al., teach that expression of WT1 gene was detected by using expression of WT1 gene. (see Table I in particular).

Baird et al., teach a method of separation hematopoietic progenitor cell from a cell population, comprising detected the expression of WT1 gene (see entire document, Abstract and Material and Method in particular). Baird et al., teach that expression of WT1 gene was detected by using expression of WT1 gene.

Loeb et al ., teach a method of separation hematopoietic progenitor cell from a cell population, comprising detected the expression of WT1 gene (see entire document, Abstract and Material and Method in particular). Loeb et al., teach that expression of WT1 gene was detected by using expression of WT1 gene.

Tsuboi et al ., teach a method of separation hematopoietic progenitor cell from a cell population, comprising detected the expression of WT1 gene (see entire document, Abstract and Material and Method in particular). Tsuboi et al., teach that expression of WT1 gene was detected by using expression of WT1 gene.

The references teaching anticipates the claimed invention.

8. No claim is allowed.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michail Belyavskiy whose telephone number is 571/272-0840. The examiner can normally be reached Monday through Friday from 9:00 AM to 5:30 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571/272-0735

The fax number for the organization where this application or proceeding is assigned is 571/273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michail A Belyavskiy/
Primary Examiner, Art Unit 1644